







This activity is adapted from *Nature Unbound: The Impact of Ecology on Missouri and the World. Nature Unbound* is the high school unit of Discover Nature Schools, the Missouri Department of Conservation's conservation education program now adopted in over 800 Missouri schools.

Activity 5B Species of Conservation Concern

Estimated time (2) 50-minute class periods

Objectives

Students will be able to:

- 1. Learn the natural history and the current status of the peregrine falcon in Missouri.
- 2. Differentiate between extinction, extirpation, threatened, endangered and functionally extinct.
- 3. Identify species that have gone extinct or are at risk of extinction and the reasons for their possible extinction (pallid sturgeon, prairie-chicken, hellbenders).
- 4. Explain why specialists are more likely to go extinct than generalists.

Teacher Preparation

In this activity students will work in small groups to research the story of the peregrine falcon in Missouri and learn about other species that have become extinct, extirpated or are of conservation concern. To find information about species in Missouri that fit these categories, have groups search http://www.mdc.mo. Groups will create and present a poster or a brochure on their research. This activity can be done during class time or as homework.

Materials

Missouri Species and Communities of Conservation Concern (brochure or on web at http://mdc.mo.gov/sites/default/files/resources/2010/04/2013_species_concern.pdf

Missouri Plants of Conservation Concern (brochure or on web at http://mdc.mo.gov/sites/default/files/resources/2010/04/4069_1692.pdf

Information on hellbenders, greater prairie-chickens and wolves is found at http://mdc.mo.gov/sites/default/files/resources/2010/04/4068_1693.pdf

Information on hellbenders, greater prairie-chickens and wolves is found at http://mww.mdc.mo.gov

Poster board Glue Markers

Procedure Part 1 Research

- 1. For background, students should read Chapter 5 of the *Nature Unbound* student book, "Extinction: Causes and Consequences."
- 2. In small groups, have students research the peregrine falcon or another species of their choice listed in *Missouri Species and Communities of Conservation Concern*.
- 3. Groups should prepare a poster or brochure which includes:
 - Name (common and scientific Genus species)
 - Current status (state, federal, global)
 - Description (include a written description as well as one or more pictures)
 - Background (habitat, niche description, specialist/generalist, etc.)
 - Major cause(s) of status
 - Current steps to assist the species in recovery locally, federally (as mandated by the Endangered Species Act) and globally, as applicable.

Note: Some species may be endangered in Missouri but not anywhere else. Presentation may be limited to a species of local concern.

Part 2 Presentations

- 1. Have groups present their posters.
- 2. As each group presents, discuss management techniques that are being used to assist the species in recovery and the pros and cons of these techniques.

Wrap up

1. Display group posters and brochures to promote future discussions.

Assessment:

See Scoring Guide for Posters (next page)

Scoring Guide for Posters

Endangered Species of Missouri Poster			
Item	0	1	2
Name		Common name of an endangered species is identified.	Common AND scientific names (<i>Genus</i> and <i>species</i>) are included.
Current Status	None identified	State or federal status is identified.	State AND federal endangered status is identified.
Description	None provided	Description of species is provided but does not include any picture.	Written description AND a picture is provided.
Background	None provided	A habitat description or niche description is provided.	Both habitat AND niche descriptions are provided.
Major Cause(s) of Endangerment	None provided	A partial description of the major cause(s) that placed this species on the endangered list is provided.	A complete description of the major cause(s) that placed this species on the endangered list is provided.
Steps toward Recovery	None provided	A partial or incomplete description of the step(s) currently being taken to allow for recovery is provided.	A complete description of the steps that are being taken on many levels that may lead to recovery of the species is provided.